Telia Carrier BGP Community Support

BGP COMMUNITIES

Telia Carrier's Internet Services (AS1299) offers a range of BGP Community options to enable customers to control their IPv4 and IPv6 traffic in-line with their business needs. This brief provides further information for customers on available community options.

Prepend & Do Not Announce

IP Transit customers can use predefined communities to prepend or deny announcements to specific Telia Carrier peers.

Communities are checked at AS1299 exit points, starting with the most specific (i.e. per-peer communities are checked before regional communities).

Allowable values for the regional & peer prepend are '0, 1, 2 & 3, denoting the number of prepends to be applied.

Telia Carrier's community support also allows customers to set multiple community actions, for example, a regional prepend of 1x and a peer- specific prepend of 2x can be set at the same time. A prepend of zero is also possible.

The most up to date list of Prepend and Do Not Announce communities can be found in the remarks section of the RIPE database entry for AS1299.

Prepend and Do Not Announce community actions are not available for Content Connect customers.

Remote Blackhole Community

The remote blackhole community allows IP Transit customers to tag announced prefixes with a community (1299:999) that will trigger Telia Carrier to automatically discard (null-route) traffic destined for the tagged prefix as soon as it enters our network. IPv4 and IPv6 prefixes can be tagged up to a /32 or /128 respectively.

Whilst not enabled by default, this capability can be requested when ordering a new service or via a change order for existing services.

To ensure security, per-prefix BGP filters must be used and customers are expected to register and maintain their prefixes and route objects in the applicable Internet Routing Registry database.

Origin Communities

Telia Carrier offers origin BGP communities to all IP Transit customers as a standard service feature.

Origin communities indicate whether a prefix was learnt from a customer or peer and also the region in which it was learnt.

Local Preference Actions

Customers also have the option to change the default local preference setting within AS1299 from 200 (customers) to either 150 (peerings) or 50 (backup).

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Prepend & Do Not Announce

Peer	Europe	US	Asia
All peers in Asia			1299:700x
All peers in Europe	1299:200x		
All peers in US		1299:500x	
AOL/1668	1299:268x	1299:568x	
AT&T/2686	1299:258x		
AT&T/2687			1299:758x
AT&T/7018		1299:558x	
Centurylink (Qwest)/209	1299:261x	1299:561x	1299:761x
Centurylink (Savvis)/3561	1299:251x	1299:551x	
China Telecom/4134	1299:288x	1299:588x	1299:788x
China Unicom/4837	1299:287x	1299:587x	1299:787x
Cogent/174	1299:273x	1299:573x	
Deutsche Telekom/3320	1299:264x	1299:564x	1299:764x
France Telecom/5511	1299:254x	1299:554x	1299:754x
Level3(GC)//3549	1299:255x	1299:555x	1299:755x
GTT/3257	1299:269x	1299:569x	1299:769x
KPN/286	1299:286x		
Level3/3356	1299:256x	1299:556x	
NTT/2914	1299:252x	1299:552x	
Sprint/1239	1299:250x		
TATA/6453	1299:263x	1299:563x	
Tele2/1257	1299:275x		
Telecom Italia/6762	1299:274x	1299:574x	1299:774x
Telefonica/12956	1299:259x	1299:559x	
Verizon/701		1299:557x	
Verizon/702	1299:257x		
XO Comm/2828		1299:578x	
Zayo/Abovenet/6461	1299:253x	1299:553x	

* Where x is the number of prepends (x=0,1,2,3) or do NOT announce (x=9)

Origin Communities

Origin Communities	
1299:20000	EU peers
1299:25000	US peers
1299:27000	Asia peers
1299:30000	EU customers
1299:35000	US customers
1299:37000	Asia customers

Remote Blackholing

Remote Blackhole Community	
1299:999	RTBH

Local Preference

Local Preference Actions within AS1299	
Default	200
1299:150	Equal to peering partners
1299:50	Lowest possible, backup

About Telia Carrier

Telia Carrier owns and operates one of the world's most extensive fiber backbones. Its mission is to provide exceptional network infrastructure and services – empowering individuals, businesses and societies to execute their most critical activities. By working close to their customers, Telia Carrier makes big ideas happen at the speed of fiber. Discover more at http://www.teliacarrier.com/.

Note: This document provides indicative overview information and is not contractually or legally binding.